

# 2011 Timothy and Kentucky Bluegrass Report

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# Introduction

Timothy (*Phleum pratense*) is the fourth most widely sown cool-season perennial grass used in Kentucky for forage after tall fescue, orchardgrass, and Kentucky bluegrass. It is a late-maturing bunchgrass that is primarily harvested as hay, particularly for horses. It can be used for grazing or wildlife habitat.

Management is similar to that for other cool-season grasses. Harvesting at the mid- to late-boot stage is needed to assure good yields and high forage quality. The quality of timothy declines more rapidly after heading than other cool-season grasses. In Kentucky, timothy behaves like a short-lived perennial, with stands usually lasting two to three years.

Kentucky bluegrass (*Poa pratensis*) is a high-quality, highly palatable, long-lived pasture plant with limited use for hay. It tolerates close frequent grazing better than most grasses. It has low yields and low summer production and becomes dormant and brown during hot, dry summers. Kentucky bluegrass is slow to establish.

This report provides current maturity and yield data on timothy and Kentucky bluegrass varieties included in yield trials in Kentucky. Tables 10 and 11 show summaries of all timothy and Kentucky bluegrass varieties tested in Kentucky for the last 10-plus years. The UK Forage Extension web site at www.uky.edu/Ag/ Forage contains forage variety testing reports from Kentucky and surrounding states and a large number of other forage publications.

		20	09			20	10			20	11 <sup>2</sup>	
	Tei	mp.	Raiı	nfall	Ter	np.	Raiı	nfall	Tei	np.	Rai	nfall
	°F	DEP <sup>1</sup>	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	28	-3	2.45	-0.41	29	-2	2.40	-0.46	29	-2	2.10	-0.76
FEB	38	+3	2.86	-0.35	29	-6	1.38	-1.83	39	+4	6.34	+3.13
MAR	48	+4	2.19	-2.21	47	+3	1.05	-3.35	47	+3	4.76	+0.36
APR	55	0	4.48	+0.60	59	+4	2.74	-1.14	58	+3	12.36	+8.48
MAY	64	0	5.05	+0.58	67	+3	7.84	+3.37	64	0	6.72	+2.25
JUN	74	+2	5.41	-1.75	76	+4	4.61	+0.95	74	+2	2.61	-1.05
JUL	71	-5	5.89	+0.89	78	+2	5.49	+0.49	80	+4	6.29	1.29
AUG	73	-2	5.38	+1.45	78	+3	1.54	-2.39	75	0	2.89	-1.04
SEP	68	0	5.37	+2.17	71	+3	1.14	-2.06	66	-2	5.52	+2.32
OCT	54	-3	4.83	+2.26	59	+2	1.22	-1.35	55	-2	4.10	+1.53
NOV	49	+4	0.94	-2.45	47	+2	4.58	+1.19				
DEC	36	0	3.86	-0.12	28	-8	2.15	-1.93				
Total			48.71	+4.16			36.14	-8.41			53.69	+16.51

<sup>2</sup> 2011 data is for the ten months through October

#### **Considerations in Selection**

Local Adaptation and Seasonal Yield. Choose a variety that is adapted to Kentucky, as indicated by good performance across locations in replicated yield trials such as those presented in this publication. Also, look for varieties that are productive in the desired season of use, whether for hay or grazing. Later maturing varieties are desirable when timothy is grown in pure stands for hay; early maturing varieties provide a better fit when timothy is grown in mixtures with legumes.

**Seed Quality.** Buy premium-quality seed that is high in germination and purity and free from weed seed. Buy certified seed or proprietary varieties of seed of an improved variety. An improved variety is one that has performed well in independent trials such as those reported in this publication.

## **Description of the Test**

Data from five studies are reported. Timothy varieties were sown at Lexington in 2008 and 2009, and Kentucky bluegrass varieties were sown at Lexington in 2008, 2009 and 2010 as part of the University of Kentucky Forage Variety Testing Program. The soil at Lexington (Maury) is a well-drained silt loam and is well suited for timothy and bluegrass production. Seedings were made at the rate of 6 lb/A for timothy and 15 lb/A for Kentucky bluegrass into a prepared seedbed with a disk drill. Plots were 5 by 20 feet in a randomized complete block design with four replications with a harvested plot area of 5 by 15 feet. Nitrogen was applied at 60 lb/A of actual N in March, May and August. The test was harvested using a sickle-type forage plot harvester leaving a 3-inch stubble to simulate a hay management system. The first cutting was harvested when spring growth of most varieties had reached the mid- to late-boot stage. Subsequent



harvests were taken when forage growth was adequate for harvest. Fresh weight samples were taken at each harvest to calculate dry matter production. Establishment, fertility, weed control, and harvest were managed according to University of Kentucky Cooperative Extension Service recommendations.

#### **Results and Discussion**

Weather data for Lexington are presented in Table 1.

Maturity ratings (see Table 2 for maturity scale) and dry matter yields are reported in Tables 3 through 7. Yields are given by harvest date for 2011 and as total annual production. Stated yields are adjusted for percent weeds; therefore, value listed is for crop only. Varieties are listed by descending total production. Experimental varieties, listed separately at the bottom of the tables, are not available commercially.

Statistical analyses were performed on all data to determine if the apparent differences are truly due to varietal differences. Varieties not significantly different from the top variety in the column are marked with one asterisk (\*). To determine if two varieties are significantly different, compare the difference between them to the Least Significant Difference (LSD) at the bottom of that column. If the difference is equal to or greater than the LSD, the varieties are significantly different when grown under those conditions. The Coefficient of Variation (CV) is a measure of the variability of the data and is included for each column of means. Low variability is desirable, and increased variability within a study results in higher CVs and larger LSDs.

Tables 8 and 9 summarize information about distributors and yield performance for Kentucky bluegrass and timothy varieties currently included in tests in this report. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Remember that experimental varieties are not available for farm use. In Table 8 and 9, an open block indicates that the variety was not in that particular test (labeled at the top of the column); an (x) in the block means that the variety was in the test but yielded significantly less than the top-yielding variety. A single asterisk (\*) means that the variety was not significantly different from the highest yielding variety, based on the 0.05 LSD. It is best to choose a variety that has performed well over several years and locations.

Tables 10 and 11 are summaries of yield data of commercial varieties for Kentucky bluegrass (1996-2011) and timothy (2000-2011) that have been entered in the Kentucky trials. The data are listed as a percentage of the mean of the commercial varieties entered in each specific trial. In other words, the mean for each trial is 100 percent—varieties with percentages over 100 yielded better than average and varieties with percentages less than 100 yielded lower than average. Direct, statistical comparisons of varieties cannot

Code	e grasses Description	Remarks
	Leaf development	
11	First leaf unfolded	Applicable to regrowth of established (plants) and to prima growth of seedlings.
12	2 leaves unfolded	Further subdivision by means of
13	3 leaves unfolded	leaf development index (see text
•	• • • • •	
19	9 or more leaves unfolded	
	Sheath elongation	
20	No elongated sheath	Denotes first phase of new spring
21	1 elongated sheath	growth after overwintering. This character is used instead of
22	2 elongated sheaths	— tillering which is difficult to reco
23	3 elongated sheaths	in established stands.
•	• • • • •	
29	9 or more elongated sheaths	
	Tillering (alternative to sheath elor	
21	Main shoot only	Applicable to primary growth
22	Main shoot and 1 tiller	of seedlingsor to single tiller transplants.
23	Main shoot and 2 tillers	
24	Main shoot and 3 tillers	
•	• • • • •	
29	Main shoot and 9 or more tillers	
	Stem elongation	
31	First node palpable	More precisely an accumulation of nodes. Fertile and sterile tillers
32	Second node palpable	distinguishable.
33	Third node palpable	
34	Fourth node palpable	
35	Fifth node palpable	
37	Flag leaf just visible	
39	Flag leaf ligule/collar just visible	
	Booting	
45	Boot swollen	
	Inflorescence emergence	
50	Upper 1 to 2 cm of inflorescence visible	_
52	<sup>1</sup> / <sub>4</sub> of inflorescence emerged	
54	1/2 of inflorescence emerged	
56	<sup>3</sup> / <sub>4</sub> of inflorescence emerged	
58	Base of inflorescence just visible	
60	Anthesis Preanthesis	
60	reantnesis	Inflorescence-bearing internode visible. No anthers are visible.
62	Beginning of anthesis	First anthers appear.
64	Maximum anthesis	Maximum pollen shedding.
66	End of anthesis	No more pollen shedding.
	Seed ripening	
75	Endosperm milky	Inflorescence green
85	Endosperm soft doughy	No seeds loosening when inflorescenceis hit on palm.
87	Endosperm hard doughy	Inflorescence losing chlorophyll; a few seeds loosening when inflorescence hit on palm.
91	Endosperm hard	Inflorescence-bearing internode losing chlorophyll; seeds looseni in quantity when inflorescence h on palm.
93	Endosperm hard and dry	Final stage of seed development most seeds shed.

be made using the summary Tables 10 and 11, but these comparisons do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have very stable performance; others may have performed very well in wet years or on particular soil types. These details may influence variety choice, and the information can be found in the yearly reports. See footnotes in Tables 10 and 11 to determine which yearly report to refer to.

## Summary

Selecting a good timothy or Kentucky bluegrass variety is an important first step in establishing a productive stand of grass. Proper management, beginning with seedbed preparation and continuing throughout the life of the stand, is necessary for even the highest yielding variety to produce to its genetic potential.

The following is a list of University of Kentucky Cooperative Extension publications related to timothy and Kentucky bluegrass management. They are available from your county Extension office and are listed in the "Publications" section of the UK Forage web site, www.uky. edu/Ag/Forage.

- *Lime and Fertilizer Recommendations* (AGR-1)
- Grain and Forage Crop Guide for Kentucky (AGR-18)
- Establishing Forage Crops (AGR-64)
- Timothy (AGR-84)
- *Kentucky Bluegrass as a Forage Crop* (AGR-134)
- Forage Identification and Use Guide (AGR-175)
- Establishing Horse Pastures (ID-147)

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Maturity <sup>2</sup> Percent Stand Yield (tons/acre)			Matı	laturity <sup>2</sup>				Per	<b>Percent Stand</b>	and					≻	Yield (tons/acre)	ns/acre	e)		
	Seedling	2009	2010	2011	11	2008	20	2009	20	2010	1102	11					2011			
Variety	Vigor <sup>1</sup> Oct 21, 2008	Apr 27	Apr 29	May J	Jun 20	oct 21	Apr 10	Oct 30	Apr 13	Oct 15	Mar 29	Oct 18	2009 Total	2010 Total	May 5	Jun 21	Aug 12	Oct 18	Total	3-year Total
<b>Commercial V</b> <sup>8</sup>	<b>Commercial Varieties-Available for Farm Use</b>	le for F	arm U	se																
RAD-1039	3.3	31.0	56.0	57.0	29.0	80	76	93	95	98	98	66	1.50	2.10	09.0	0.74	0.43	0.64	2.41	6.01*
Ginger	2.3	31.0	57.5	59.0	29.0	59	71	85	88	94	86	98	1.11	2.19	0.86	0.76	0.40	0.49	2.50	5.80*
Common	3.0	29.5	29.0	29.0	60.0	75	93	66	66	66	66	66	0.94	1.26	0.02	0.58	0.18	0.46	1.25	3.44
<b>Experimental Varieties</b>	Varieties																			
RAD-C101110	5.0	58.0	55.5	57.5	29.0	96	98	100	100	100	100	100	1.56	1.98	0.87	0.80	0.33	0.37	2.37	5.90*
Mean	3.4	37.4	49.5	50.6	36.8	77.5	84.6	94.1	95.3	97.6	98.7	98.8	1.28	1.88	0.59	0.59 0.72 0.34 0.49	0.34	0.49	2.13	5.29
CV,%	20.4	1.3	3.6	2.7	0.0	12.3	11.1	5.8	5.8	2.3	1.7	1.7	15.98	16.42	16.42 17.67 23.52 24.54 21.03	23.52	24.54	_	16.46	12.45
LSD,0.05	1.1	0.8	2.9	2.1	0.0	15.2	2.1 0.0 15.2 15.1 8.7	8.7	8.9	3.6	2.7	2.7	0.33	0.49	0.17	0.17 0.27 0.13 0.16	0.13	0.16	0.56	1.05
<ol> <li>Vigor score bi 2 Maturity ratin pollen shed.</li> <li>* Not significan</li> </ol>	<sup>1</sup> Vigor score based on scale of 1 to 5 with 5 being the most vigorous seedling growth. <sup>2</sup> Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale. * Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.	1 to 5 v leaf en omplet n the h	vith 5 k nergen e scale ighest r	ce, 45=k	e most ooot sw al value	vigoroi vollen, 5 e in the	us seed 60=begi columr	ing gro nning c 1, based	wth. of inflor on the	escence 0.05 LS	emerg	ence, 5	8=comp	lete eme	rgence (	of inflor	escence	e, 62=be	ginning	of

Table 4. Dry matter yields, seedling vigor, maturity and stand persistence of Kentucky bluegrass varieties sown September 11, 2009 at Lexington, Kentucky.

		N	laturity	/ <sup>2</sup>		Per	cent St	and				Yiel	d (tons	/acre)		
	Seedling	2010	20	11	2009	20	10	20	11				2011			
Variety	Vigor <sup>1</sup> Nov 16, 2009	May 7	May 5	Jun 20	Nov 16	Apr 13	Oct 18	Mar 29	Oct 18	2010 Total	May 5	Jun 21	Aug 12	Oct 18	Total	2-year Total
Commercia	l Varieties-Avai	lable fo	or Farm	Use												
Ginger	3.0	57.0	60.0	29.0	93	96	99	100	100	1.78	1.12	1.31	0.34	0.63	3.40	5.17*
Barderby	4.0	58.0	57.5	29.0	96	97	100	100	100	1.59	1.15	1.14	0.33	0.54	3.16	4.75*
BigBlue	1.0	29.0	59.5	29.0	25	28	60	75	91	0.33	0.87	1.32	0.20	0.71	3.11	3.44
Experiment	tal Varieties															
B-9.0931	4.3	54.5	54.5	29.0	96	99	100	100	100	1.60	0.76	1.12	0.33	0.66	2.87	4.48
B-9.0927	3.8	29.0	29.0	60.0	97	99	99	100	100	1.44	0.35	1.54	0.23	0.77	2.88	4.32
B-9.0928	2.3	29.0	55.5	29.0	56	92	96	99	100	1.15	0.64	0.90	0.24	0.77	2.55	3.70
		-														
Mean	3.0	42.8	52.7	34.2	77.1	85.0	92.3	95.6	98.4	1.31	0.82	1.22	0.28	0.68	2.99	4.31
CV,%	24.2	3.5	1.7	0.0	15.6	6.8	5.2	3.1	1.1	13.60	10.19	18.76	24.77	14.30	10.71	9.58
LSD,0.05	1.1	2.3	1.3	0.0	18.1	8.7	7.2	4.5	1.6	0.27	0.13	0.35	0.10	0.15	0.48	0.62
1 1 0		64.	E 1.1	- 1 .	.1											

<sup>1</sup> Vigor score based on scale of 1 to 5 with 5 being the most vigorous seedling growth.
 <sup>2</sup> Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginnin of pollen shed. See Table 2 for complete scale.
 \* Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

	Percen	t Stand		Yield (to	ns/acre)	
	20	11		20	11	
Variety	Jul 12	Oct 18	Jul 12	Aug 12	Oct 18	Total
Commercial V	Varieties-A	vailable fo	or Farm Us	e		
Kenblue	97	98	0.42	0.34	0.82	1.58*
Ginger	98	87	0.66	0.27	0.49	1.42*
Barderby	95	90	0.50	0.32	0.50	1.32*
Experimenta	l Varieties					
B-9.0967	98	96	0.39	0.20	0.65	1.24*
RAD-KCC4L	85	65	0.26	0.23	0.31	0.81
Mean	94.2	87.0	0.43	0.27	0.56	1.26
CV,%	9.3	21.5	19.25	22.10	26.65	17.05
LSD,0.05	14.1	30.1	0.14	0.10	0.24	0.35

Table 6.	Dry matter yield	ls, seed	ling vi	gor, ma	turity a	and sta	nd per	sistenc	e of tin	nothy v	arietie	s sown S	eptemb	er 11, 2	008 at	Lexing	ton, Ken	itucky
		N	laturity	/ <sup>2</sup>			Per	cent St	and				-	Yield	(tons/a	cre)		
	Seedling	2009	2010	2011	2008	20	09	20	10	20	11				20	011		
	Vigor <sup>1</sup>	May	May	May	Oct	Apr	Oct	Apr	Oct	Mar	Oct	2009	2010	May	Aug	Oct		3-year
Variety	Oct 21, 2008	21	24	12	21	10	30	13	15	29	27	Total	Total	12	9	21	Total	Total
Commerc	ial Varieties-Av	ailable	for Far	m Use														
Clair	1.8	56.5	58.0	55.5	91	97	99	100	100	99	98	4.93	3.43	1.54	0.24	0.25	2.02	10.38*
Climax	4.3	56.0	58.0	53.5	98	100	100	100	99	99	97	4.83	3.45	1.30	0.27	0.25	1.82	10.11*
Joliette	4.0	48.5	51.5	37.5	98	100	100	100	99	100	100	3.93	2.86	0.93	0.41	0.24	1.58	8.37
Experime	ntal Varieties																	-
KYEarly	5.0	57.5	58.0	58.0	100	100	99	100	98	98	96	4.97	3.20	1.27	0.29	0.18	1.74	9.91*
APH1001	3.8	46.8	46.8	41.8	99	100	100	99	98	97	95	3.81	3.11	0.79	0.36	0.20	1.34	8.26
																		-
Mean	3.8	53.1	54.5	49.3	97.1	99.4	99.5	99.6	98.6	98.4	97.1	4.49	3.21	1.17	0.31	0.22	1.70	9.40
CV,%	14.8	4.2	2.9	7.7	2.2	0.7	0.9	0.8	1.6	1.7	3.9	11.78	8.40	17.22	23.88	25.16	13.48	7.04
LSD,0.05	0.9	3.4	2.5	5.8	3.4	1.1	1.3	1.3	2.4	2.5	5.8	0.82	0.42	0.31	0.11	0.12	0.35	1.02
<sup>1</sup> Vigor sco	ore based on sca	le of 1 t	o 5 witl	h 5 heir	na the n	nost via	iorous s	eedling	arowt	h								-

<sup>1</sup> Vigor score based on scale of 1 to 5 with 5 being the most vigorous seedling growth.
 <sup>2</sup> Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.
 \* Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 7. Dry matter yields, seedling vigor, maturity and stand persistence ot timothy varieties sown September 11, 2009 at Lexington, Kentucky.

		Matu	ırity <sup>2</sup>		Per	cent St	and				Yiel	d (tons	/acre)		
	Seedling	2010	2011	2009	20	10	20	11				2011			
Variety	Vigor <sup>1</sup> Oct 13, 2009	May 25	May 12	Oct 13	Apr 13	Oct 18	Mar 29	Oct 27	2010 Total	May 12	Jul 15	Aug 9	Oct 21	Total	2-year Total
Commercia	al Varieties-Ava	ilable f	or Farn	n Use											
Derby	3.5	56.5	51.0	95	100	99	99	97	3.96	1.77	0.84	0.12	0.74	3.47	7.44*
Talon	2.8	56.0	50.5	91	98	98	98	97	3.96	1.78	0.78	0.12	0.74	3.41	7.37*
Treasure	4.3	57.0	43.5	98	100	99	99	99	4.09	1.64	0.77	0.17	0.65	3.23	7.33*
Clair	1.0	57.5	52.0	9	93	94	97	96	3.55	1.74	0.85	0.15	0.83	3.57	7.12*
Express	3.6	55.5	42.0	96	99	98	98	97	3.92	1.26	0.85	0.11	0.65	2.87	6.79*
Climax	2.9	58.0	45.3	96	99	96	94	93	3.79	1.48	0.77	0.08	0.66	2.99	6.77*
Barfleo	4.1	51.5	42.0	96	99	99	100	100	3.66	1.45	0.72	0.14	0.58	2.89	6.55*
Joilette	4.0	50.5	40.5	99	100	99	99	96	3.68	1.09	0.76	0.11	0.63	2.59	6.27
Mean	3.3	55.3	45.8	84.9	98.4	97.5	97.8	96.6	3.83	1.53	0.79	0.12	0.68	3.13	6.95
CV,%	21.4	2.1	5.4	5.5	1.9	1.9	1.7	2.9	10.40	13.62	22.48	28.63	15.96	10.84	9.40
LSD,0.05	1.0	1.7	3.6	6.9	2.7	2.7	2.4	4.1	0.59	0.31	0.26	0.05	0.16	0.50	0.96

<sup>1</sup> Vigor score based on scale of 1 to 5 with 5 being the most vigorous seedling growth.
 <sup>2</sup> Maturity rating scale: 37=flag leaf emergence, 45=boot swollen, 50=beginning of inflorescence emergence, 58=complete emergence of inflorescence, 62=beginning of pollen shed. See Table 2 for complete scale.
 \* Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

	Proprietor/KY		2008 <sup>1</sup>		20	09	2010
Variety	Distributor	09 <sup>2</sup>	10	11	10	11	11
<b>Commercial Va</b>	rieties-Available for F	arm Us	e				
Barderby	Barenbrug USA				*	*	*
BigBlue	Rose-AgriSeed				x	*	
Common	Public	x <sup>3</sup>	х	x			
Ginger	ProSeeds Marketing	x	*	*	*	*	*
Kenblue	Public						*
Lato	Allied Seed						
RAD-1039	Radix Research	*	*	*			
Experimental \	/arieties						
B-9.0927	Blue Moon Farms				x	x	
B-9.0928	Blue Moon Farms				x	x	
B-9.0931	Blue Moon Farms				*	x	
B-9.0967	Blue Moon Farms						*
RAD-C101110	Radix Research	*	*	*			
RAD-KCC4L	Radix Research						x

<sup>1</sup> Establishment year
 <sup>2</sup> Harvest year
 <sup>3</sup> x in the block indicates the variety was in the test but yielded significantly less than the top yielding variety in the test. Open boxes indicate the variety was not in the test.
 \* Not significantly different from the highest yielding variety in the test.

			2008 <sup>1</sup>		20	09
Variety	<b>Proprietor/KY Distributor</b>	09 <sup>2</sup>	10	11	10	11
Commerci	al Varieties-Available for Farm	Jse				
Barfleo	Barenbrug USA				*	x <sup>3</sup>
Barpenta	Barenbrug USA					
Clair	Ky Agric. Exp. Station	*	*	*	*	*
Climax	Canada Agr. Res. Station	*	*	*	*	*
Derby	FFR Cooperative				*	*
Express	Seed Research of Oregon				*	x
Joliette	Caudill Seed	x	х	x	*	x
Talon	Seed Research of Oregon				*	*
Treasure	Seed Research of Oregon				*	*
Experimer	ntal Varieties			-	-	
APH1001	ProSeeds Marketing	x	*	x		
KY Early	Ky Agric. Exp. Station	*	*	*		

 <sup>2</sup> Establishment year
 <sup>2</sup> Harvest year
 <sup>3</sup> x in the block indicates the variety was in the test but yielded significantly less than the top yielding variety in the test. Open boxes indicate the variety was not in the test.

\* Not significantly different from the highest yielding variety in the test.

				L	exingto	n			Princeton	
		96 <sup>1,2</sup>	03	04	06	07	08	09	02	Mean <sup>3</sup>
Variety	<b>Proprietor/KY</b> Distributor	3yr <sup>4</sup>	2yr	3yr	4yr	3yr	3yr	2yr	3yr	(#trials)
Adam 1	Radix Research			98						-
Barderby	Barenbrug USA					94		107	114	104(2)
BigBlue	Rose-AgriSeed							77		-
Common	Public				71	66	68			68(3)
Ginger	ProSeeds Marketing		89		118	119	114	116		111(5)
Kenblue	Public	90		102	133					110(3)
Lato	Turf Seed Inc.	110				122				116(2)
RAD-5	Radix Research				103					-
RAD-339	Radix Research				101					-
RAD-643	Radix Research				94					-
RAD-731zx	Radix Research				87					-
RAD-762	Radix Research				94					-
RAD-1039	Radix Research						118			-
Slezanka	DLF International Seeds		111							_

Siezanka DLF International seeds 111 - 1
 Year trial was established
 Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2004 was harvested 2 years, so the final report would be "2006 Timothy and Kentucky Bluegrass Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>. The 96 and 03 Lexington and 02 Princeton results are in the appropriate Tall Fescue Reports.
 Mean only presented when respective variety was included in two or more trials
 Number of years of data

				L	exingto	n			Quick	csand	Princ	eton	
		<b>00</b> <sup>1,2</sup>	01	02	06	07	08	09	99	01	00	04	Mean <sup>3</sup>
Variety	Proprietor/KY Distributor	2yr <sup>4</sup>	3yr	4yr	3yr	3yr	3yr	2yr	2yr	2yr	3yr	2yr	(#trials)
Alma	Newfield Seeds Co/Caudill Seed Co.											81	-
Auroro	General Feed and Grain	100							98				99(2)
Barfleo	Barenbrug USA							94					-
Barpenta	Barenbrug USA					74							-
Clair	Ky Agric. Exp. Station		109	115	107	95	108	102		108		122	108(8)
Classic	Cebeco International Seeds	100		88					87				92(3)
Climax	Canada Agr. Res. Station				79	102	105	97					96(4)
Colt	FFR Cooperative	105		101	90				112			99	101(5)
Common	Public		96										-
Derby	FFR Cooperative				112	111		107				124	114(4)
Dolina	DLF-Trifolium	100		91									96(2)
Express	Seed Research of Oregon			97		91		98					95(3)
Hokuei	Snow Brand Seed	103											-
Hokusei	Snow Brand Seed	97							99				98(2)
Joliette	Newfield Seeds Co/Caudill Seed Co.						87	90				90	89(3)
Jonaton	Newfield Seeds Co/Caudill Seed Co.											84	-
Outlaw	Grassland West Company										107		-
Richmond	Pickseed Canada Inc.	100							103				102(2)
Summit	Allied Seed, L.L.C.			114									-
Talon	Seed Research of Oregon				110	112		106					109(3)
Treasure	Seed Research of Oregon				103	115		105					108(3)
Tundra	DLF-Trifolium	95											-
Tuukka	Ampac Seed Company		95	90						92	93		93(4)

<sup>1</sup> Year trial was established.
 <sup>2</sup> Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2000 was harvested 2 years, so the final report would be "2002 Timothy Report" archived in the KY Forage website at <www.uky.edu/Ag/Forage>.
 <sup>3</sup> Mean only presented when respective variety was included in two or more trials.
 <sup>4</sup> Number of years of data.



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